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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,045	02/20/2004	Jim D. Meador	32849	6833

7590 07/13/2005

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EXAMINER

MOORE, MARGARET G

ART UNIT PAPER NUMBER

1712

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/784,045	Applicant(s) MEADOR ET AL.	
	Examiner Margaret G. Moore	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 88 is/are pending in the application.
- 4a) Of the above claim(s) 1 to 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41, 42, 44-48, 50, 52-54, 56-58, 60-63, 65, 67, 68, 71, 72, 75, 76, 78-81, 83, 85 and 86 is/are rejected.
- 7) ☒ Claim(s) 43, 49, 51, 55, 59, 64, 66, 69, 70, 73, 74, 77, 82, 84, 87 and 88 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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6.

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1. Applicant's election without traverse of Group II in the reply filed on 6/8/05 is acknowledged.
2. Applicants have amended the claims to include the functional limitation "exhibits a percent stripping of less than about 5% when subjected to a stripping test". This fails to adequately overcome the instant rejections for reasons noted below.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 41, 42, 44, 48, 50, 52, 53, 58, 60, 63, 65, 67, 71, 76, 78, 81, 83 and 85 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lichtenhan et al.

The basis for this rejection has been shifted from a 102 rejection to a 102/103 inherency-type rejection which relies on rationale consistent with that in paragraph 12 of the prior office action. That is, the prior art fails to specifically teach the stripping test property as now claimed. The compositions, however, are the same. When applicants

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claim a composition in terms of a function, property or characteristic and the prior art composition is the same as that claimed but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/ 103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale should also apply to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims. See MPEP 2112 (III).

Applicants argue that the prior art fails to teach such a property. The stripping test measures the property of the composition when cured but the claims do not require that the composition be cured. Patentees do not teach the stripping test property for the composition when cured but this is a property for the crosslinked composition not the composition in claims 41, 53 and 71. Note for instance that applicants state on page 31 of their response that the composition "can be formed into a cured layer", not that it is a cured layer.

The composition in the claims is clearly met by the teachings in Lichtenhan et al. Since the compositions are the same, there is nothing that would suggest that the prior art composition does not have the ability to meet this requirement when cured. Since the compositions are the same it would naturally follow that the composition in Lichtenhan et al. also *can be formed* into a cured layer having the claimed property. Applicants argue that the composition as claimed is thermosetting, but a better statement would be that the composition is *able to be* thermoset since nothing in claim 41 that indicates any crosslinking or thermosetting. Again, the composition in claim 41 can a compound, for instance a compound meeting formula (III). This clearly is not a thermoset compound since no crosslinking or polymerization is present.

As such the claims remain rejected as being inherently the same as that claimed. Applicants attempt to distinguish claims which require a crosslinking agent or catalyst from the teachings in Lichtenhan et al. is not persuasive because, again, note that the

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composition can contain a compound, not necessarily a polymer, and thus the monomer with which the compound is crosslinked, or the catalyst that causes such crosslinking, meets this requirement. The instant claims read on a polymerization reaction.

6. Claims 41, 42, 44 to 48, 50, 52 to 54, 57, 58, 60 to 63, 65, 67, 71, 72, 75, 76, 78 to 81, 83 and 85 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Angelopoulos et al.

For reasons consistent with that noted supra, the instant claims are rejected as being inherently the same as that taught by Angelopoulos et al.

To further support the Examiner's position of inherency note that the composition in Angelopoulos et al. is cured or crosslinked (see for instance column 8, lines 47 and 48 which refer to an acid catalyzed reaction). Also, while the layer is dissolved by alkaline solution (column 8, line 55), the stripping test defined in the instant specification uses a non-alkaline solvent. There is nothing that would lead the skilled artisan to expect that the composition in Angelopoulos et al. would dissolve in a non-alkaline solvent.

7. Claims 68 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelopoulos et al.

This rejection is maintained from the previous office action. Applicants appear to rely on the limitations in claims 53 and 71 in overcoming this rejection.

8. Claims 43, 49, 51, 55, 59, 64, 66, 69, 70, 73, 74, 77, 82, 84, 87 and 88 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For claims 43, 59 and 77 the prior art fails to teach or suggest such a compound having the hydroxypropyldimethylsilyloxy groups. For claims 49, 64 and 82, the prior art fails to teach or suggest an aminoplast crosslinking agent. For claims 51, 66 and 84, the prior art fails to teach or suggest a weak acid and a strong acid in combination (page 7 of applicants' specification defines these terms). For claims 55,

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69, 70, 73, 74, 87 and 88, the prior art fails to teach or suggest forming a photoresist layer on top of the POSS containing layer. Claim 56 would be allowable if amended to overcome the 35 USC 112 rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

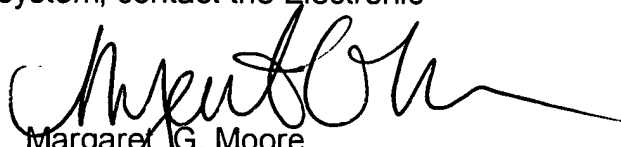
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
7/11/05